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FIG. 1.

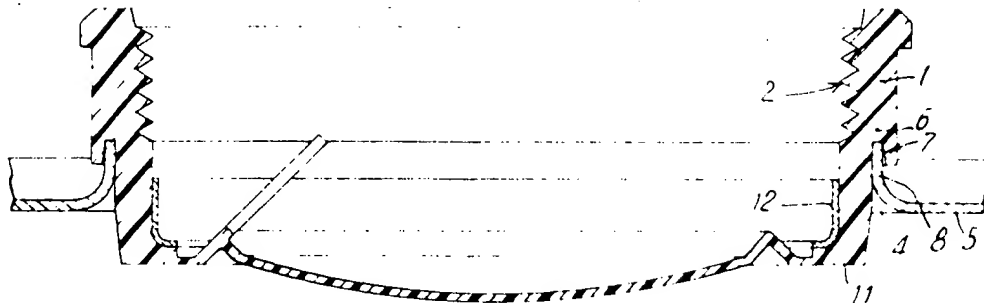


FIG. 2.

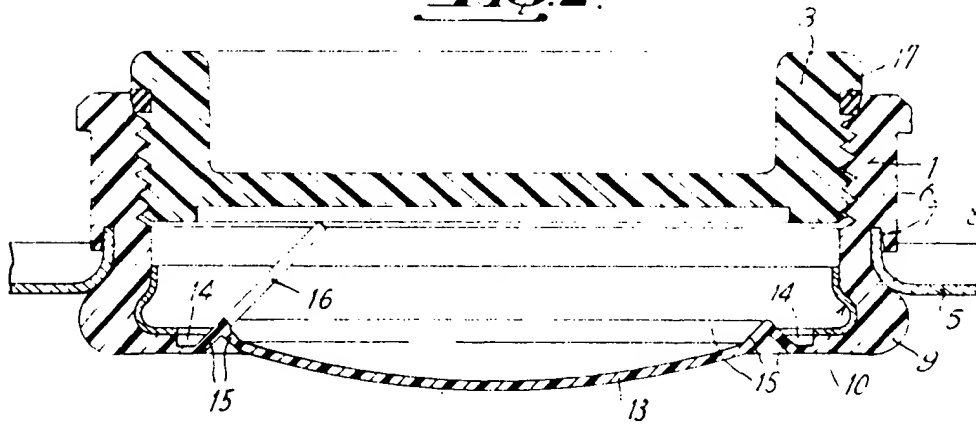
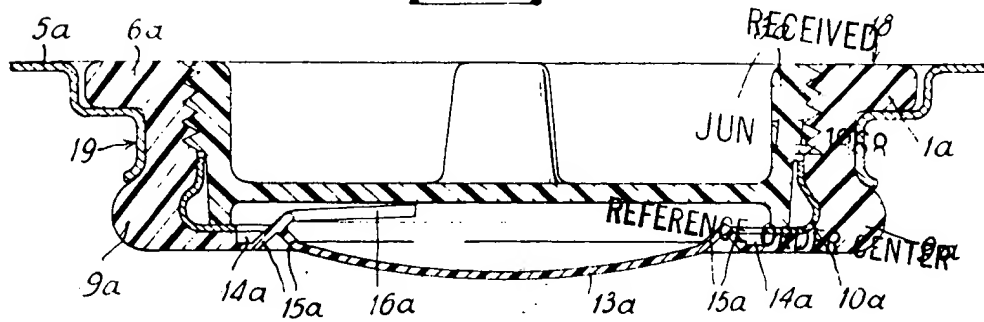


FIG. 3.



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CANADA  
DIV. \_\_\_\_\_

# CANADIAN PATENT

BUNG

Pierre-Henri Gallay, Paris, France

Granted to Frame S.A., Fribourg, Switzerland

APPLICATION No. 843,028  
FILED Feb. 23, 1962  
PRIORITY DATE June 5, 1961 Switzerland  
  
No. OF CLAIMS 1

Bungs are already known comprising a body of plastic material, threaded to receive a stopper, engaged in an opening in the wall of a metallic container and provided, for its water-tight attachment to this wall, with a collar moulded of a piece therewith and an expanded circular peripheral rim, provided internally with a sleeve forming a rigid brace maintaining the shape of the rim, the annular edge of the said opening in the above-mentioned wall being gripped between this rim and the collar, the above-mentioned body having a base closing the bung and designed to be removed when the bung is opened.

However, experience has shown that, when casks provided with such bungs remain in the open air, exposed to temperature changes which may be very considerable, the base closing the bung and ensuring its inviolability is subjected, due to these temperature changes, to strains which may be so high that cracks or a tearing of this base follows.

The present invention aims at removing this difficulty and has for object a bung of the type which has just been described, which is characterized in that the above-mentioned removable base is provided in its peripheral region with an annular part forming a bellows in order to limit the magnitude of the stresses in the said base, due to temperature changes, owing to the elastic deformation of this annular part.

The accompanying drawing shows, by way of example, two embodiments of the bung object of the invention.

Fig. 1 is a view in axial section of the first embodiment, after the introduction but before the



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the contents of the container have not been made accessible to a third party.

This base 13 is provided, in its peripheral region, with an annular part 15 forming a bellows. In cross section, this part has the shape of a dihedron, as is seen in fig. 2. It will be understood that if the bung is subjected to high changes of temperature, the expansions and contractions which may arise will have for sole effect to produce an elastic deformation of the part 15, without there resulting any harmful stresses in the base 13 itself.

The presence of this annular part 15 forming a bellows thus limits the magnitude of the stresses in the said base and consequently remedies the disadvantage noted above. The base no longer risks to be damaged as a result of the stresses to which it is subjected due to important temperature changes.

At 16 is seen a clip integral with the base 13 and which is merely destined to be seized in order to facilitate the tearing of the base 13 and to prevent it from falling inside the container when it is removed from the body 1.

At 17 is seen an insulating joint gripped between the stopper 3 and the body 1, in order to ensure a watertight closure of the container after the base 13 has been withdrawn.

In the example according to fig. 3, the construction is but little different. It merely permits the use of a stopper 3a, on a level, when it is in place, with the upper part 18 of the body 1a of the bung. In this second

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The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

A bung comprising a body of plastic material, threaded to receive a stopper, engaged in an opening in the wall of a metallic container and provided, for its water-tight attachment on this wall, with a collar moulded of one piece therewith and an expanded circular peripheral rim, internally provided with a sleeve forming a rigid brace maintaining the form of this rim, the annular edge of the said opening in the above-mentioned wall being gripped between this rim and the collar, the above-mentioned body having a base closing the bung and designed to be removed when the bung is opened, characterized in that this removable base is provided in its peripheral region with an annular part forming a bellows, in order to limit the magnitude of the stresses in the said base, due to temperature changes, owing to the elastic deformation of this annular part.

